

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently amended) A radio frequency testing method of an electronic device in conjunction with production of electronic devices, the method comprising:

measuring, by at least one sensor of a measurement arrangement which is part of a production line of the electronic devices, at least one radio frequency property of the electronic device under test, the electronic device under test outputting at least one measurement signal;

performing a comparison between the at least one measurement signal and at least one corresponding reference signal which imitates a known defect; and

determining a cause of a defect of the electronic device based on the comparison.

2. (Previously presented) The method of claim 1, further comprising:

changing states of the electronic device sequentially; and

performing a comparison between the at least one measurement signal and the at least one corresponding reference signal related to the sequence of the states of the electronic device.

3. (Previously presented) The method of claim 1, further comprising:
 - performing a comparison between the at least one measurement signal and at least one corresponding reference signal representing an electronic device without defects, the comparison measuring similarity between the compared signals;
 - determining the defectiveness of the electronic device as acceptable, if the similarity is higher than a predetermined threshold; and
 - determining the defectiveness of the electronic device as unacceptable, if the similarity is the same as the predetermined threshold or lower than the predetermined threshold.

4. (Previously presented) The method of claim 3, further comprising:
 - forming a comparison factor measuring similarity between the compared signals in the comparison;
 - determining the defectiveness of the electronic device as acceptable, if the comparison factor has a higher value than a predetermined threshold value; and
 - determining the defectiveness of the electronic device as unacceptable, if the comparison factor has the same value as a predetermined value or a lower value than the predetermined threshold value.

5. (Previously presented) The method of claim 1, further comprising:
 - performing a comparison between the at least one measurement signal and at least one corresponding reference signal representing an electronic device with at least one defect, the comparison measuring similarity between the compared signals;
 - determining the defectiveness of the electronic device as unacceptable, if the similarity is the same as a predetermined threshold or higher than the predetermined threshold; and
 - determining the defectiveness of the electronic device as acceptable, if the similarity is lower than the predetermined threshold.
6. (Previously presented) The method of claim 5, further comprising:
 - forming a comparison factor measuring similarity between the compared signals in the comparison;
 - determining the defectiveness of the electronic device as unacceptable, if the comparison factor has the same value as a predetermined threshold value or a higher value than the predetermined threshold value; and
 - determining the defectiveness of the electronic device as acceptable, if the comparison factor has a lower value than the predetermined threshold value.

7. (Previously presented) The method of claim 5, further comprising:
using a reference signal representing an electronic device with at least one known defect; and
determining the type of defect in the electronic device according to the at least one known defect.
8. (Currently amended) The method of claim 1, further comprising:
comparing at least two measurement signals for determining defectiveness of the electronic device.
9. (Previously presented) The method of claim 1, wherein measuring further comprises at least one of the following: measuring an audio property, measuring analog signaling, measuring digital signaling, measuring optical signaling, or measuring a mechanical property, and
the measurement is performed by at least one sensor outputting at least one measurement signal.
10. (Currently amended) A radio frequency testing method of a mobile phone in conjunction with production of mobile phones, the method comprising:
measuring, by at least one sensor of a measurement arrangement which is part of a production line of the mobile phones, at least one radio frequency property of the

mobile phone under test, the mobile phone under test outputting at least one measurement signal;

performing a comparison between the at least one measurement signal and at least one corresponding reference signal which imitates a known defect; and

determining a cause of a defect of the mobile phone based on the comparison.

11. (Currently amended) A radio frequency testing arrangement of an electronic device in conjunction with production of electronic devices, the arrangement comprising:

at least one sensor of a measurement arrangement which is part of a production line of the electronic devices, the at least one sensor outputting at least one measurement signal relating to at least one radio frequency property of the electronic device under test;

a reference supply for providing at least one reference signal;

a comparator for performing comparison between the at least one measurement signal and at least one corresponding reference signal which imitates a known defect;
and

a decision unit for determining a cause of a defect of the electronic device based on the comparison.

12. (Previously presented) The arrangement of claim 11, further comprising:

a controller for changing states of the electronic device sequentially, the comparator being configured to perform the comparison between the at least one measurement signal and the at least one corresponding reference signal related to the sequence of the states of the electronic device.

13. (Original) The arrangement of claim 11, wherein the comparator is configured to perform the comparison measuring similarity between the at least one measurement signal and the at least one corresponding reference signal representing an electronic device without defects,

the decision unit is configured to determine the defectiveness of the electronic device as acceptable, if the similarity is higher than a predetermined threshold, and

the decision unit is configured to determine the defectiveness of the electronic device as unacceptable, if the similarity is the same as the predetermined threshold or lower than the predetermined threshold.

14. (Original) The arrangement of claim 13, wherein the comparator is configured to form a comparison factor measuring similarity between the compared signals,

the decision unit is configured to determine the defectiveness of the electronic device as acceptable, if the comparison factor has a higher value than a predetermined threshold value, and

the decision unit is configured to determine the defectiveness of the electronic device as unacceptable, if the comparison factor has the same value as a predetermined value or a lower value than the predetermined threshold value.

15. (Original) The arrangement of claim 11, wherein the comparator is configured to perform the comparison measuring similarity between the at least one measurement signal and at least one corresponding reference signal representing an electronic device with at least one defect,

the decision unit is configured to determine the defectiveness of the electronic device as unacceptable, if the similarity is the same as a predetermined threshold or higher than the predetermined threshold, and

the decision unit is configured to determine the defectiveness of the electronic device as acceptable, if the similarity is lower than the predetermined threshold.

16. (Original) The arrangement of claim 15, wherein the comparator is configured to form a comparison factor measuring similarity between the compared signals in the comparison,

the decision unit is configured to determine the defectiveness of the electronic device as unacceptable, if the comparison factor has the same value as a predetermined threshold value or a higher value than the predetermined threshold value, and

the decision unit is configured to determine the defectiveness of the electronic device as acceptable, if the comparison factor has a lower value than the predetermined threshold value.

17. (Original) The arrangement of claim 15, wherein the reference supply is configured to provide a reference signal representing an electronic device with at least one known defect, and the decision unit is configured to determine the type of defect in the electronic device according to the at least one known defect.

18. (Original) The arrangement of claim 11, wherein the comparator is configured to compare at least two measurement signals for determining defectiveness of the electronic device.

19. (Original) The arrangement of claim 11, wherein at least one sensor is configured to perform at least one measurement of the following: measuring audio, measuring analog signaling, measuring digital signaling, measuring optical signaling and mechanical measurements, and output at least one measurement signal,

the reference supply is configured to provide at least one corresponding reference signal,

the comparator is configured to perform comparison between the at least one measurement signal and at least one corresponding reference signal, and

the decision unit is configured to determine defectiveness of the electronic device based on the comparison.

20. (Currently amended) A radio frequency testing arrangement of a mobile phone in conjunction with production of mobile phones, the arrangement comprising:

at least one sensor of a measurement arrangement which is part of a production line of the mobile phones, the at least one sensor outputting at least one measurement signal relating to at least one radio frequency property of the mobile phone under test;

a reference supply for providing at least one reference signal;

a comparator for performing a comparison between the at least one measurement signal and at least one corresponding reference signal which imitates a known defect; and

a decision unit for determining a cause of a defect of the mobile phone based on the comparison.